Optional Features for Outdoor Learning Areas

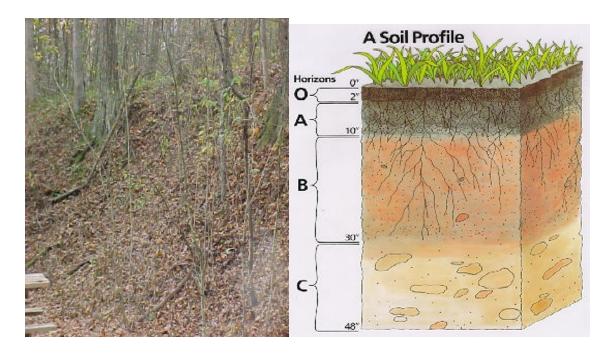
Soils

Description — All things in the outdoor learning area begin with soil. Assuring the site is well prepared with topsoil with adequate sublayers during the building phase will save much time and effort later. However, if adding an outdoor learning area to an existing school site, topsoil can be added. Your local Conservation District or Natural Resource Conservation Service offices are excellent sources for help with this feature. See http://weba.ky.gov/genericsearch/LicenseSearch.asp?AGY=17 to search for an office in your county. It is also important that all sites have a soil test in several areas of the school grounds. Without a soil test, you could be applying too much, too little, or not enough nutrients to sustain your green space and its accompanying wildlife. Survey for areas in need of erosion control. It is crucial to check for erosion on the school grounds so valuable topsoil will not be lost. Native grasses provide excellent erosion control. Soil profiles and composting sites can enhance student and community learning, as well as provide areas for study of this essential resource.

Size – Soil profiles (pits) need to be at least six feet deep to show examples of humus, root, clay, and rock layers. (See "Challenges" below for safety issues related to soil profiles.) See also

http://www.liverpool.k12.ny.us/standards/lstandards/curriculum/sci/g3sci/soillayers.html and http://ltpwww.gsfc.nasa.gov/globe/

Location – Walking the school property and surveying with soil conservation issues in mind will help you decide on the location of diverse learning stations. While large equipment is available, scooping into an existing bank during the construction phase can save time and labor later. That exposed area can provide an excellent example of a soil profile and its components. Having diverse areas with differing soil attributes preserved needs only the addition of student soil probes, soil thermometers, and pH testing kits to produce many opportunities to extend student learning. Since all schools are built on soil, these areas exist at every site.



Materials Needed – Commercial soil test kits are available at nurseries and lawn and garden suppliers. Plants to aid in erosion control may be necessary.

Labor Needed – If large equipment can be used for sculpting the soil profile, labor needs are greatly reduced. If no equipment is available, the profile must be shoveled by hand.

Technical Assistance – Your local conservation district or Natural Resource Conservation Service Offices can provide expertise, materials for investigations, and ideas for learning stations. See http://weba.ky.gov/genericsearch/LicenseSearch.asp?AGY=17 for an office in your county.

Maintenance – Checking of school grounds for areas of erosion and testing of soil for adding nutrients may be necessary.

Challenges – When soil profiles are done on steep banks, it is important to keep students off the top for safety reasons. You should also take care that soil profile sites are stable. No student should be near a soil profile site until an expert has checked it for stability. This should be done periodically, especially after periods of heavy rain.